

1

1T1C 1-Transistor 1-Capacitor

3

3D 3-Dimensional
3G Third-Generation (Wireless)
3T 3-Transistor

$\Delta\Sigma$

$\Delta\Sigma$ Sigma-Delta
 $\Delta\Sigma M$ Sigma-Delta Modulator

A

a-Si Amorphous Silicon
AC Alternating Current
A/D Analog-to-Digital Converter
AAC Advanced Audio Coding
ACI Adjacent-Channel Interface
ACLR Adjacent-Channel Leakage Power Ratio
ACPR Adjacent-Channel Power Ratio
ADC Analog-to-Digital Converter
ADDLL All-Digital Delay-Locked Loop
ADSL Asynchronous Digital Subscriber line
AES Advanced Encryption Standard
AFC Automatic Frequency Control
AFE Analog Front End
AGC Automatic Gain Control
AGU Address-Generation Unit
AlN Aluminum Nitride
ALU Arithmetic - Logic Unit
AM Amplitude Modulation
AMOLED Active-Matrix OLED
AMPS Advanced Mobile-Phone Service
AMS Analog Mixed-Signal {System}
APD Avalanche Photo-Diode
APG Algorithmic Pattern Generator
APSK Amplitude Phase-Shift Keying
ARM Advanced RISC Machine
ASIC Application-Specific Integrated Circuit
ASK Amplitude Shift Keying
ASP Advanced Simple Profile {MPEG-4 Video}
ATA Advanced Technology Attachment
ATD Address-Transition Detection
ATE Automatic Test Equipment
ATM Asynchronous Transfer Mode
ATPG Automatic Test-Pattern Generation
ATSC Advanced Television Systems Committee
AVC Audio-Visual CODEC
AVC Automatic Volume Control {use AGC}
AWG Arrayed-Waveguide Grating

B

BAW Bulk Acoustic Wave
BB BaseBand
BBT Band-to-Band Tunneling
BCD Bipolar-CMOS-DMOS Process
BCD Binary-Coded Decimal
BCH Bose-Chaudhuri-Hocquenghem
 {a type of error-correcting code}

BD Blu-ray disc
BER Bit-Error Rate
BGA Ball-Grid Array
BGR Band-Gap Reference
BiCMOS Bipolar Complementary-MOS
BIOS Basic Input/Output System
BIST Built-in Self-Test
BJT Bipolar Junction Transistor
BL Bit Line
BOM Bill of Materials
BPF BandPass Filter
BPSK Binary Phase-Shift Keying
B-VOP Bidirectional-Video Object Planes
BW BandWidth

C

C4 Controlled-Collapse Chip Connection
CAD Computer-Aided Design
CAM Content-Addressable Memory
CAS Column-Address Strobe
CCCS Current-Controlled Current Source
CCD Charge-coupled Device
CCK Complementary Code Keying
CCO Current-Controlled Oscillator
CCVS Current-Controlled Voltage Source
CDMA Code-Division Multiple Access
CDR Clock and Data Recovery
CDS Correlated Double Sampling
CHE Channel Hot-Electron (Injection)
CISC Complex-Instruction-Set Computer
CML Current-Mode Logic
CMOS Complementary MOS
CMRR Common-Mode Rejection Ratio
CMU Clock Multiplier Unit
CO Central-Office {hardware}
CODEC Coder-Decoder
COFDM Coded FDM
CPE Customer Premises Equipment
CPU Central Processing Unit
CPW CoPlanar Waveguide
CRC Cyclic Redundancy Check
CSMA Carrier-Sense Multiple Access
CT Continuous Time {system}
CUI Command User Interface
CVD Chemical Vapor Deposition

D

D/A Digital-to-Analog Converter
DAB Digital-Audio Broadcasting
DAC Digital-to-Analog Converter
dBFS dB relative to Full Scale
DBS Direct-Broadcast Satellite
DCO Digitally Controlled Oscillator
DCT Discrete Cosine Transform
DCVS Differential Cascode Voltage Switch
DCVS Digitally-Controlled Voltage Source
DCXO Digitally Controlled Crystal Oscillator
DDFS Direct-Digital Frequency Synthesis
 (or synthesizer)

DDR	Dual Data Rate
DDS	Direct Digital Synthesis
DECT	Digitally Enhanced Cordless Communication
DEM	DEModulator
DEM	Dynamic Element Matching
DEMOS	Depletion MOS
DEMUX	Demultiplexer
DES	Data-Encryption Standard
DEVN	Differential Error Vector Magnitude
DFE	Decision-Feedback Equalizer
DFM	Design For Manufacturability
DFT	Design for Testability
DFT	Discrete Fourier Transform
DIMM	Dual In-Line Memory Module
DIP	Dual In-line Package
DJ	Deterministic Jitter
DLL	Delay-Locked Loop
DMA	Direct Memory Access
DMB	Digital Multimedia Broadcasting
DMOS	(Double-)Diffused MOS
DNA	Deoxyribonucleic Acid
DNL	Differential Non-Linearity
DNR	Dynamic Range (see also DR)
DOM	Digital Optical Module
DR	Dynamic Range (see also DNR)
DRAM	Dynamic Random-Access Memory
DRC	Design-Rule Check
DSB	Double Side-Band
DSL	Digital Subscriber Line
DSNU	Dark Signal Non-Uniformity
DS-OFDM	Direct-Sequence Orthogonal Frequency Division Multiplexing
DSP	Digital Signal Processing
DSSS	Direct-Sequence Spread-Spectrum
DT	Discrete Time
DTL	Diode-Transistor Logic
DUT	Device Under Test
DVB	Digital-Video Broadcasting
DVB-C	Digital-Video Broadcasting - Cable
DVB-H	Digital-Video Broadcasting - Handhelds
DVB-S	Digital-Video Broadcasting - Satellite
DVB-T	Digital-Video Broadcasting - Terrestrial
DVD	Digital Video Disc
DVS	Dynamic Voltage Scaling
DWA	Data Weighted Averaging
DWDM	Dense-Wavelength-Division Multiplexing

E

ECC	Error-Correcting Code
ECG	Electro-CardioGram
ECL	Emitter-Coupled Logic
ECP	Emitter-Coupled Pair
FD	Floating Diffusion
EDGE	Enhanced Data rates for Global Evolution
EDR	Enhanced Data Rate
EEG	Electro-EncephaloGram
EEPROM	Electrically Erasable Programmable Read-Only Memory
EFR	Enhanced Full-Rate (GSM)
EIRP	Effective Isotropic Radiated Power

EMG	Electro-MioGram
EMI	Electro Magnetic Interference
ENOB	Effective Number Of Bits
EOT	Electrical Oxide Thickness
EPROM	Erasable Programmable Read-Only Memory
ERBW	Effective-Resolution Bandwidth
ESD	ElectroStatic Discharge
EVDO	EVolution Data Optimized (in the context of CDMA)
EVM	Error-Vector Magnitude
EWC	Enhanced Wireless Consortium

F

FAMOS	Floating-gate Avalanche-injection MOS Transistor
FBAR	Film Bulk Acoustic Resonator
FCC	Federal Communications Commission (U.S.)
FDM	Frequency-Division Multiplexing
FDMA	Frequency-Division Multiple-Access
FDNR	Frequency-Dependent Negative Resistor
FEC	Forward Error Checking
FeRAM	Ferro-electric Random Access Memory
FET	Field-Effect Transistor
FF	Flip-Flop
FFE	Feed-Forward Equalizer
FFT	Fast Fourier Transform
FIB	Focused Ion Beam
FIFO	First In-First Out
FinFET	A MOSFET with the gate on two sides {acronym describes the physical shape}
FIR	Finite Impulse Response {filter}
FLOTOX	Floating-gate Tunnel OXide
FM	Frequency Modulation
FMCW	Frequency-Modulated Continuous Wave
FN	Fowler-Nordheim
F04	Fan-Out of 4
FOM	Figure Of Merit
FPGA	Field-Programmable Gate Array
FPN	Fixed Pattern Noise
FPU	Floating Point Unit
f_s	sampling frequency
FSG	FluoroSilicate glass {dielectric}
FSG	Fluorine-doped Silicate Glass
FSK	Frequency-Shift Keying
FSM	Finite-State Machine
f_t	transition frequency
f_T	Transition frequency

G

GBW	Gain-BandWidth {product}
GCA	Gain-Controlled Amplifier
GDDR	Graphics Double-Data-rate RAM
GFSK	Gaussian Frequency-Shift Keying
GIDL	Gate-Induced Drain Leakage
GMSK	Gaussian Minimum-Shift Keying
GOPS	Giga-Operations Per Second
GPRS	General Packet-Radio Service
GPS	Global Positioning System
GSM	Global Standard for Mobile Communication

H

HBT	Hetero-junction Bipolar Transistor
HCI	Host-Controller Interface
HCI	Human-to-Computer Interface
HD	High-Density
HDL	Hardware-Description Language
HDTV	High-Definition TeleVision
HD2, 3	Harmonic Distortion, 2 nd - or 3 rd -order
HiFi	High Fidelity
HM-Zd	Hard-Metric(IEC 61076-4-101) Z-differential
HPF	High-Pass Filter
HSPDA	High-Speed Downlink Packet Access
HVMOS	High-Voltage Complementary MOS
HVMOS	High-Voltage MOS

I

I/O	Input-Output
I/Q	In Phase and Quadrature
IBOC	In-Band Out-of-Channel
IC	Integrated Circuit
ID	Identification
IF	Intermediate Frequency
IIP2	Input referred Input 2nd-order Intercept Point
IIP3	Input referred Input 3rd-order Intercept Point
IIR	Infinite Impulse Response Filter
ILD	Injection-Locked Divider
ILO	Injection-Locked Oscillator
IMD	Inter-Modulation Distortion
IM2, 3	InterModulation distortion, 2 nd - or 3 rd -order
INL	Integral Non-Linearity
InP	Indium Phosphide
IP	Intellectual Property
IPSEC	Internet (Network) Protocol for Security
IR	Image Rejection
IR	InfraRed
ISDB	Integrated Services Digital Broadcasting
ISDB-C	Integrated Services Digital Broadcasting - Cable
ISDB-S	Integrated Services Digital Broadcasting - Satellite
ISDB-T	Integrated Services Digital Broadcasting - Terrestrial
ISI	Inter-Symbol Interference
ISM	Industrial, Scientific and Medicine Band
ITS	Intelligent Transportation Systems
ITU-T	International Telecommunications Union

J

JPEG	Joint Photographic Expert Group
JTAG	Joint Test-Automation Group

L

LAN	Local-Area Network
LCD	Liquid-Crystal Display
LCOS	Liquid-Crystal On Silicon
LDCMOS	Laterally Diffused Complementary Metal-Oxide Silicon

LDMOS

LDO	Low Drop-Out {regulator}
LDPC	Low-Density Parity Check
LED	Light-Emitting Diode
LFCSP	LeadFrame Chip-Scale Package
LFSR	Linea- Feedback Shift Register
LMS	Least Mean Square
LNA	Low-Noise Amplifier
LNB	Low-Noise Blockers
LO	Local Oscillator
LPCVD	Low-Pressure Chemical-Vapor Deposition
LPF	Low-Pass Filter
LR	Locking Range
LSB	Least-Significant Bit
LSI	Large-Scale Integration
LTPS	Low-Temperature-Poly Silicon
LVDS	Low-Voltage Differential Signaling
LVS	Layout Verification to Schematic

M

MAC	Media-Access Controller
MASH	Multi-stAge noise SHaping
MBOA	Multi-Band OFDM Alliance
MB-OFDM	Multi-Band OFDM
MB-OFDM	Multi-Band Orthogonal Frequency Division Multiplexing
MCM	Multi-Chip Module
MCU	MicroController Unit
MDS	Minimum Detectable Signal
MEMS	Micro-Electro-Mechanical System
MER	Modulation Error Ratio
MIM	Metal-Insulator-Metal
MIMO	Multiple- Input, Multiple-Output
MIPS	Million Instructions Per Second
MLSE	Maximum-Likelihood-Sequence Estimation
MMIC	Monolithic Microwave Integrated Circuit
MODEM	MODulator-DEModulator
MOS	Metal-Oxide-Semiconductor (Silicon)
MOSFET	Metal-Oxide-Semiconductor FET
MOST	MOS Transistor
MP	Multi-Processor
MPEG	Motion-Picture Expert Group
Mpps	Million packets per second {VoIP}
MSB	Most Significant Bit
MRAM	Magnetic Random-Access Memory
MRAM	Magnetoresistive Random-Access Memory
MRC	Maximum-Ratio Combining
MSB	Most-Significant Bit
MTJ	Magnetic Tunnel Junction
MTPR	Multi-Tone Power Ratio
MUX	MULTipleXer

N

NBTI	Negative-Bias Temperature Inversion
NF	Noise Figure
NIC	Negative-Impedance Converter
NMOS	nN-channel MOS
NMOST	NMOS Transistor
NPN	N-type-P-type-N-type (bipolar transistor)

NRTZ	Non Return-To-Zero (see also NRZ)
NRZ	Non-Retun- to-Zero (see also NRTZ)
NTF	Noise Transfer Function
NVM	Non-Volatile Memory
NVRAM	Non-Volatile Random-Access Memory

O

ODT	On-die Termination
OEM	Original-Equipment Manufacturer
OFDM	Orthogonal Frequency-Division Multiplexing
OIF	Optical-Internetworking Forum
OIP2,3	Output referred of 2nd- and 3rd-Order Intercept Point
OLED	Organic LED
ONO	Oxide-Nitride-Oxide
OOK	On-Off Keying
OSR	Over-Sampling Ratio
OTA	Operational Trans-conductance Amplifier
OTP	One Time Programmable

P

P_{1dB}	1dB gain-compression Point
PA	Power Amplifier
PA	Public-Address (system)
PAE	Power-Added Efficiency
PAM	Pulse-Amplitude Modulation
PAN	Personal-Area Network
PAR	Peak-to-Average Ratio
PCB	Printed-Circuit Board
PCI	Peripheral-Component Interconnect
PCI-X	PCI Express
PCM	Pulse-Code Modulation
PCS	Personal Communication Services
PD	Phase Detector
PDA	Personal Data Assistant
PFD	Phase and Frequency Detector
PGA	Programmable-Gain Amplifier
PGA	Programmable Gate Array
PHEMT	Pseudomorphic High-Electron-Mobility Transistor
PHY	PHYSical layer {of a communications protocol}
PID	Proportional, Integral, Derivative (a type of control loop)
PIN	P-type-Intrinsic-N-type (diode)
PLA	Programmable Logic Array
PLC	Power-Line Communication
PLD	Programmable Logic Device
PLL	Phase-Locked Loop
PMOS	P-channel MOS
PMOST	PMOS transistor
PMU	Power Management Unit
PNP	P-type-N-type-P-type (bipolar transistor)
PON	Passive Optical Network
POTS	Plain-Old Telephone Service
ppm	parts per million
PPM	Pulse-Position Modulation
PR	Pseudo Random
PR	Partial Response
PRAM	Phase-change RAM

PRBS	Psuedo-Random Binary Sequence
PRML	Partial-Response, Maximum-Likelihood
PRNU	Photon Response Non-Uniformity
PROM	Programmable Read-Only Memory
PSD	Power Spectral Density
PSK	Phase-Shift Keying
PSNR	Peak SNR
PSRR	Power-Supply Rejection Ratio
PTAT	Proportional To Absolute Temperature
PVD	Physical Vapor Deposition
PVT	Process, Voltage, Temperature
PWM	Pulse-Width Modulation

Q

QAM	Quadrature Amplitude Modulation
QDR	Quad Data Rate
QoS	Quality of Service
QPSK	Quadrature Phase-Shift Keying
QVCO	Quadrature Voltage-Controlled Oscillator
QVGA	Quarter Video Graphics Array

R

R/W	ReadWrite
RAM	Random-Access Memory
RBW	Resolution BandWidth
RF	Radio Frequency
RFID	RF ID (tag)
RISC	Reduced-Instruction-Set Computer
RJ	Random Jitter
ROM	Read-Only Memory
rms	root mean square
ROM	Read-Only Memory
RSA	A public-key cryptographic system, named after: Ron Rivest, Adi Shamir, and Leonard Adleman
RSSI	Received-Signal-Strength Indicator
RTL	Resistor-Transistor Logic
RTZ	Return-To-Zero
RX	Receiver
RZ	Return-to-Zero (see also RTZ)

S

SAR	Successive-Approximation-Register
SATA	Serial AT-Attachment
SC	Switched-Capacitor
SCL	Source-Coupled Logic
SCP	Source-Coupled Pair
SCR	Silicon Controlled Rectifier
S-DMB	Satellite Digital-Multimedia Broadcasting
SDR	SoftwareDefined Radio
SDRAM	Synchronous Dynamic Random-Access Memory
SDT	Software-Defined Transceiver
SEM	Scanning Electron Microscope
SER	Soft-Error Rate
SER	Symbol-Error Rate
SerDes	Serializer/Deserializer
SFDR	Spuriou- Free Dynamic Range

SFI	Serdes Framer Interface
S/H	Sample-and-Hold
SHA	Sample-and-Hold Amplifier
SiGe	Silicon Germanium
SiGe:C	Silicon, Germanium, Carbon
SILC	Stress-Induced Leakage Current
SIMD	Single-Instruction Multiple-Data
SINAD	Signal-to-Noise And Distortion (ratio)
SIO	Synchronous I/O
SIP	Single-In-line Package
SiP	System in (a) Package
SMP	Symmetric Multi-Processing
SNDR	Signal-to-Noise and Distortion Ratio
SNR	Signal-to-Noise Ratio
SoC	System on (a)Chip
SOI	Semiconductor on Insulator
SONET	Synchronous Optical NETwork
SONOS	Silicon-Oxide-Nitride-Oxide-Silicon
SOS	Silicon On Sapphire
SP	Simple Profile
SPDT	Single Pole Double Throw
SPI	System Packet Interface
SRAM	Static Random-Access Memory
SSB	Single Side-Band
SSC	Spread Spectrum Clocking
SSO	Simultaneous Switching Output
SSTL	Stub Series Terminated Logic
STF	Signal Transfer Function

T

TC	Temperature Coefficient
TCAM	Ternary Content-Addressable Memory
TCP	Transmission Control Protocol
TDDb	Time-Dependent Dielectric Breakdown
TDM	Time-Division Multiplexing
TDMA	Time-Division Multiple-Access
TD-SCDMA	Time-Division Synchronous Code-Division Multiple Access
TEM	Tunneling-Electron Microscope
TFMS	Thin-Film Microstrip
TFT	Thin-Film Transistor
T/H	Track and Hold
THA	Track-and-Hold Amplifier
THD	Total Harmonic Distortion
THD+N	THD plus Noise
TOPS	Tera-Operations Per Second
TRX	Transceiver
TSPC	True Single-Phase Clocking
TTL	Transistor-Transistor Logic
TV	Television
TX	Transmitter

U

UDTV	Ultra-high-Definition TeleVision
UHF	Ultra-High Frequency
UI	Unit Interval
UIPP	Unit Interval Peak-to-Peak
U-NII	Unlicensed National Information Infrastructure
UMTS	Universal Mobile-Telecommunication System

UPROM	Unerasable Programmable Read-Only Memory
USB	Universal Serial Bus
UTP	Unshielded Twisted Pair
UWB	Ultra-WideBand
UXGA	Ultra-eXtended Graphics Array

V

VCCS	Voltage-Controlled Current Source
VCDL	Voltage-Controlled Delay Line
VCO	Voltage-Controlled Oscillator
VCVS	Voltage-Controlled Voltage-Source
VCXO	Voltage-Controlled Crystal Oscillator
VCSEL	Vertical-Cavity Surface-Emitting Laser
VDMOS	Vertically Diffused MOS
VGA	Variable-Gain Amplifier
VGA	Video Graphics Array
VLW	Very Long Instruction Word
VLF	Very Low Frequency
VLSI	Very Large-Scale Integration
VSb	Vestigial Side Band
VSWR	Voltage Standing-Wave Ratio
V_T	Thermal Voltage
V_t	(Device-) threshold Voltage (also, V _{tn} and V _{tp})

W

WCDMA	Wideband Code-Division Multiple- Access
WEP	Wired-Equivalent Privacy
WFSGA	Very Very thin Fine-Pitch Semi-ball-Grid Array
WiFi	Wireless Fidelity; {an interoperability certification for WLAN products based on the IEEE 802.11, standard}
WiMax	Worldwide Interoperability for Microwave Access (also known as IEEE802.16)
WL	Word Line
WLAN	Wireless Local-Area Network

X

XAUI	(10 Gigabit) eXtended Attachment Unit Interface
XDR	Extreme Data Rate
XENPAK	A standard that defines a type of fiber-optic transceiver modules which are compatible with the 10 Gigabit Ethernet (10 GbE) standard
XFMR	TransForMeR
XFP	Small form-factor pluggable
XGA	Extended Graphics Array
XiP	Execute in-Place
XO	Crystal Oscillator